

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P959193

Luminaire Tested: **NAV-SB1A-722-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-722-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3079.1 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

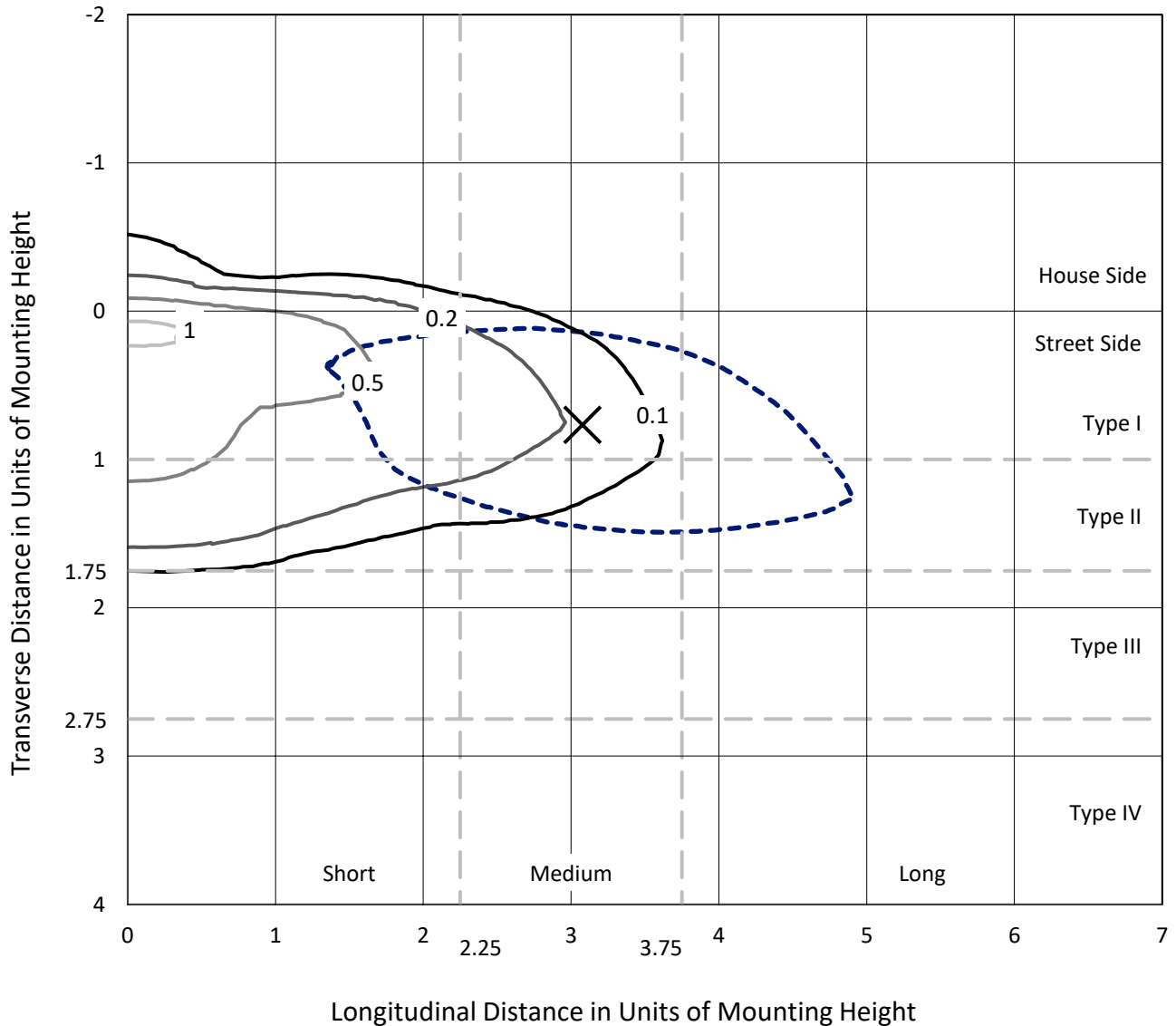
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

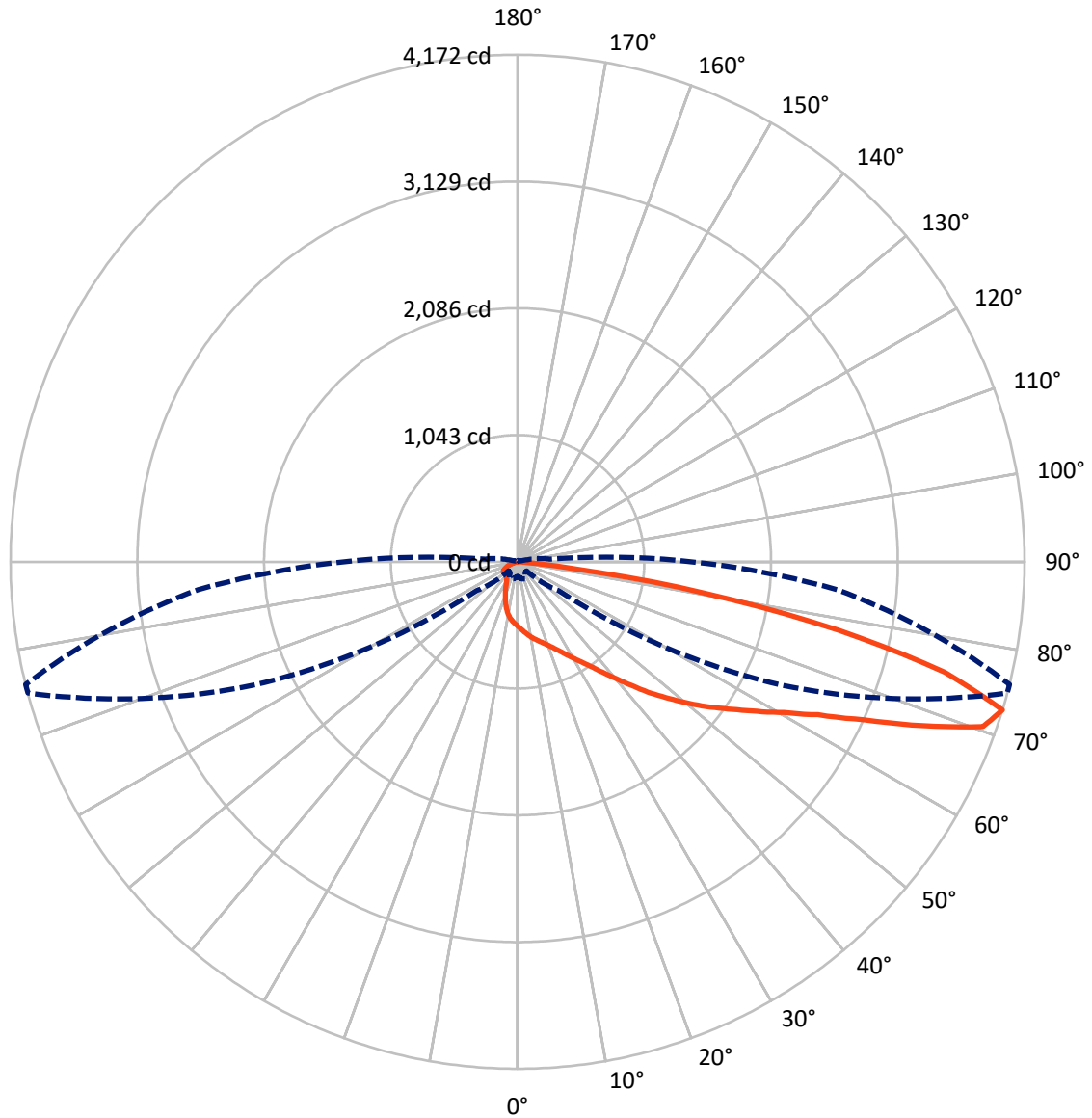
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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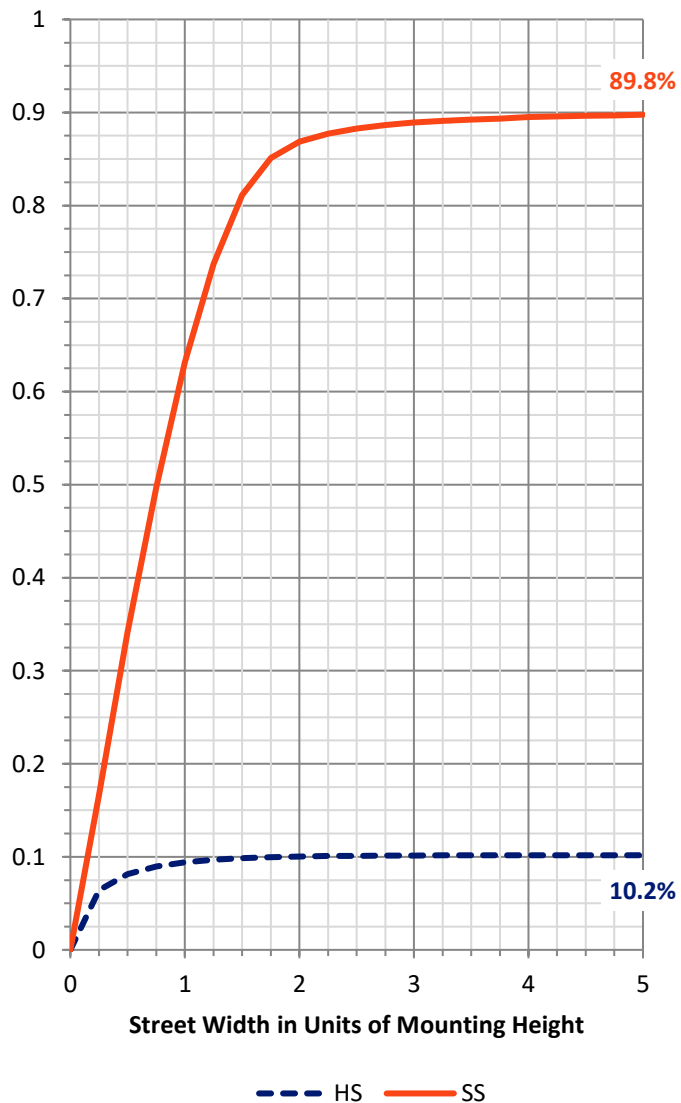
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 315.1 | 0.0 | 315.1 |
| | % Fixture | 10.2 | 0.0 | 10.2 |
| Street Side | Lumens | 2764.0 | 0.0 | 2764.0 |
| | % Fixture | 89.8 | 0.0 | 89.8 |
| Total | Lumens | 3079.1 | 0.0 | 3079.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 48.4 | 1.6 |
| 10°-20° | 129.8 | 4.2 |
| 20°-30° | 205.4 | 6.7 |
| 30°-40° | 317.7 | 10.3 |
| 40°-50° | 482.6 | 15.7 |
| 50°-60° | 665.3 | 21.6 |
| 60°-70° | 702.9 | 22.8 |
| 70°-80° | 482.2 | 15.7 |
| 80°-90° | 44.9 | 1.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 3079.1 | 100.0 |
| 0°-180° | 3079.1 | 100.0 |

Coefficient of Utilization

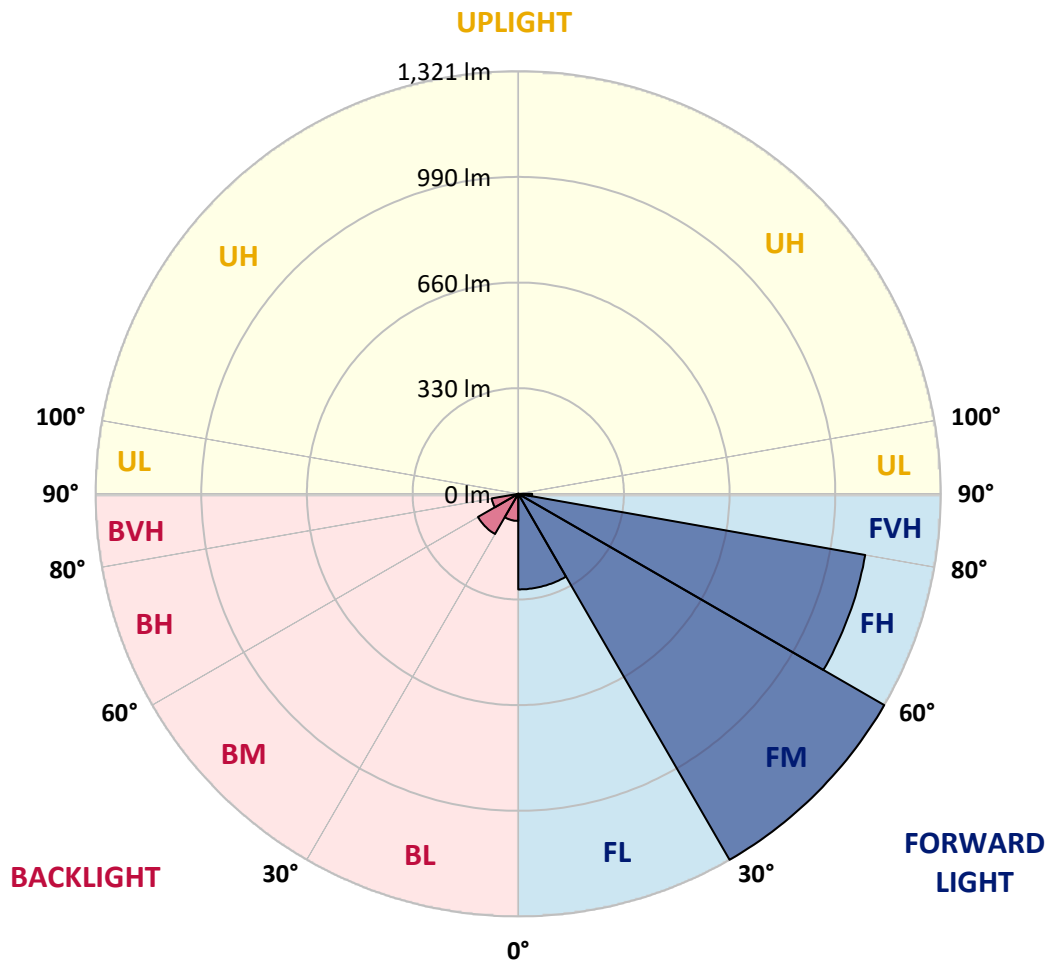


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 298.8 | 9.7 | | | |
| FM (30°-60°) | 1320.6 | 42.9 | | | |
| FH (60°-80°) | 1100.9 | 35.8 | | | G1/1800 |
| FVH (80°-90°) | 43.7 | 1.4 | | | G1/100 |
| BL (0°-30°) | 84.7 | 2.8 | B0/110 | | |
| BM (30°-60°) | 145.1 | 4.7 | B0/220 | | |
| BH (60°-80°) | 84.1 | 2.7 | B0/110 | | G0/110 |
| BVH (80°-90°) | 1.2 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 |
| 2.5° | 618.6 | 610.4 | 612.0 | 603.8 | 600.0 | 590.8 | 581.3 | 568.7 | 554.6 | 554.6 | 541.1 |
| 5° | 683.7 | 678.6 | 678.6 | 668.9 | 661.5 | 647.2 | 630.0 | 607.8 | 581.4 | 578.8 | 553.1 |
| 7.5° | 723.6 | 720.5 | 722.4 | 716.9 | 710.8 | 695.9 | 675.5 | 646.6 | 609.2 | 606.0 | 567.2 |
| 10° | 731.4 | 731.2 | 736.9 | 738.4 | 742.4 | 734.8 | 716.7 | 683.3 | 636.5 | 631.9 | 579.4 |
| 12.5° | 701.3 | 697.5 | 711.2 | 727.4 | 750.2 | 760.3 | 751.0 | 716.9 | 661.5 | 655.2 | 590.8 |
| 15° | 651.7 | 652.5 | 665.7 | 690.6 | 728.7 | 765.0 | 777.2 | 749.6 | 686.9 | 679.3 | 601.6 |
| 17.5° | 623.4 | 620.3 | 631.8 | 654.2 | 696.1 | 747.4 | 789.4 | 780.1 | 713.8 | 705.3 | 612.5 |
| 20° | 620.0 | 619.8 | 622.4 | 632.5 | 664.5 | 722.2 | 787.9 | 810.0 | 745.6 | 735.6 | 628.3 |
| 22.5° | 643.6 | 643.2 | 640.9 | 639.0 | 647.7 | 697.7 | 782.0 | 838.2 | 783.6 | 772.7 | 650.8 |
| 25° | 679.7 | 679.1 | 675.7 | 663.5 | 655.0 | 684.5 | 776.3 | 864.7 | 828.5 | 816.5 | 677.9 |
| 27.5° | 723.9 | 723.4 | 717.3 | 698.8 | 676.7 | 685.7 | 773.6 | 891.9 | 880.5 | 868.7 | 709.3 |
| 30° | 778.0 | 777.2 | 764.3 | 738.4 | 709.5 | 704.7 | 777.4 | 922.4 | 934.6 | 925.6 | 745.4 |
| 32.5° | 845.8 | 843.7 | 826.9 | 787.7 | 747.2 | 730.0 | 784.5 | 953.8 | 998.7 | 990.3 | 793.8 |
| 35° | 898.4 | 895.0 | 885.2 | 850.6 | 791.0 | 761.2 | 801.3 | 990.9 | 1075.7 | 1068.4 | 855.5 |
| 37.5° | 943.5 | 940.1 | 932.1 | 903.8 | 853.6 | 800.9 | 828.3 | 1040.4 | 1166.9 | 1163.3 | 930.8 |
| 40° | 992.3 | 986.7 | 982.9 | 952.5 | 907.2 | 858.2 | 866.8 | 1098.4 | 1271.7 | 1272.1 | 1021.2 |
| 42.5° | 1029.8 | 1027.7 | 1028.1 | 1004.7 | 958.9 | 926.2 | 918.0 | 1163.7 | 1397.4 | 1401.2 | 1130.1 |
| 45° | 1062.0 | 1060.2 | 1067.5 | 1051.2 | 1011.1 | 970.7 | 978.0 | 1237.6 | 1534.7 | 1542.5 | 1251.9 |
| 47.5° | 1086.8 | 1088.8 | 1099.3 | 1088.8 | 1065.2 | 1002.0 | 1031.0 | 1317.2 | 1679.2 | 1680.2 | 1377.8 |
| 50° | 1111.5 | 1112.3 | 1129.9 | 1124.7 | 1115.1 | 1041.8 | 1079.9 | 1406.3 | 1831.4 | 1833.2 | 1495.4 |
| 52.5° | 1119.3 | 1118.1 | 1146.1 | 1158.9 | 1159.3 | 1090.9 | 1143.3 | 1503.4 | 1980.6 | 1986.3 | 1616.4 |
| 55° | 1079.3 | 1082.8 | 1127.9 | 1179.9 | 1200.4 | 1158.9 | 1228.8 | 1626.3 | 2139.6 | 2141.9 | 1736.4 |
| 57.5° | 884.1 | 902.8 | 1002.7 | 1123.1 | 1226.9 | 1256.1 | 1351.6 | 1769.9 | 2323.2 | 2320.9 | 1857.7 |
| 60° | 536.5 | 558.8 | 678.3 | 942.0 | 1140.3 | 1353.8 | 1532.6 | 1992.4 | 2523.7 | 2517.5 | 1980.6 |
| 62.5° | 300.0 | 306.8 | 344.9 | 563.9 | 867.3 | 1291.7 | 1709.3 | 2278.2 | 2792.9 | 2771.9 | 2101.5 |
| 65° | 221.1 | 223.3 | 232.3 | 276.2 | 426.2 | 993.5 | 1670.5 | 2619.9 | 3171.2 | 3133.8 | 2246.2 |
| 67.5° | 192.2 | 194.3 | 203.2 | 209.1 | 190.3 | 521.9 | 1376.4 | 2809.5 | 3651.6 | 3602.7 | 2442.2 |
| 70° | 161.7 | 163.0 | 177.1 | 181.1 | 136.2 | 198.5 | 884.3 | 2751.0 | 4096.2 | 4061.3 | 2652.5 |
| 72.5° | 120.6 | 125.5 | 146.0 | 155.6 | 109.3 | 105.5 | 416.3 | 2405.3 | 4171.4 | 4171.9 | 2638.4 |
| 75° | 81.9 | 86.3 | 109.9 | 128.0 | 84.3 | 73.9 | 168.0 | 1796.0 | 3632.4 | 3632.4 | 2312.7 |
| 77.5° | 56.0 | 59.6 | 76.5 | 100.4 | 64.0 | 50.7 | 87.1 | 1139.9 | 2606.0 | 2697.6 | 1648.4 |
| 80° | 24.8 | 27.0 | 49.3 | 72.9 | 48.6 | 32.8 | 49.3 | 624.1 | 1575.9 | 1556.6 | 646.2 |
| 82.5° | 12.2 | 13.9 | 31.6 | 45.5 | 31.4 | 20.2 | 25.9 | 296.8 | 510.8 | 485.3 | 100.9 |
| 85° | 2.4 | 3.2 | 17.0 | 19.4 | 14.6 | 9.0 | 9.7 | 91.3 | 61.5 | 70.3 | 21.4 |
| 87.5° | 0.0 | 0.0 | 5.2 | 3.6 | 1.6 | 1.9 | 1.9 | 8.2 | 4.8 | 5.6 | 5.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 | 532.1 |
| 2.5° | 533.9 | 526.5 | 510.3 | 494.4 | 478.0 | 463.0 | 452.6 | 442.2 | 435.8 | 433.1 | 433.5 |
| 5° | 538.1 | 523.1 | 489.1 | 453.6 | 418.4 | 384.1 | 358.3 | 334.2 | 326.6 | 314.0 | 314.8 |
| 7.5° | 544.7 | 520.3 | 466.8 | 406.8 | 349.7 | 299.4 | 263.0 | 234.1 | 222.5 | 211.4 | 211.2 |
| 10° | 549.1 | 515.2 | 437.3 | 357.1 | 279.8 | 223.3 | 188.6 | 167.6 | 160.0 | 153.2 | 153.0 |
| 12.5° | 550.8 | 505.5 | 403.2 | 301.3 | 217.7 | 170.1 | 149.4 | 139.6 | 137.0 | 134.6 | 134.6 |
| 15° | 552.5 | 496.1 | 365.3 | 247.6 | 172.0 | 142.4 | 134.2 | 131.0 | 129.3 | 127.6 | 127.6 |
| 17.5° | 553.9 | 484.2 | 322.0 | 201.3 | 145.2 | 131.2 | 127.2 | 123.8 | 122.5 | 120.6 | 120.6 |
| 20° | 558.6 | 472.5 | 283.2 | 166.2 | 130.6 | 123.2 | 118.8 | 115.2 | 114.1 | 112.9 | 113.1 |
| 22.5° | 567.6 | 463.2 | 245.7 | 142.4 | 121.9 | 115.0 | 109.5 | 105.5 | 104.7 | 103.8 | 103.2 |
| 25° | 578.4 | 451.6 | 210.3 | 127.0 | 113.3 | 105.7 | 99.4 | 96.0 | 95.3 | 95.4 | 95.1 |
| 27.5° | 592.2 | 438.8 | 180.0 | 117.3 | 105.7 | 96.9 | 89.9 | 87.3 | 87.6 | 88.5 | 88.0 |
| 30° | 607.4 | 427.0 | 156.2 | 110.5 | 98.9 | 89.1 | 82.1 | 80.3 | 81.7 | 82.9 | 82.5 |
| 32.5° | 630.0 | 416.7 | 139.6 | 105.1 | 92.9 | 82.7 | 77.1 | 74.9 | 76.5 | 78.1 | 77.7 |
| 35° | 660.7 | 411.4 | 130.3 | 100.4 | 87.6 | 77.7 | 72.1 | 70.5 | 72.1 | 72.5 | 72.3 |
| 37.5° | 698.4 | 411.0 | 126.3 | 96.7 | 82.9 | 73.5 | 67.3 | 66.7 | 68.0 | 68.1 | 67.8 |
| 40° | 747.2 | 413.7 | 123.2 | 93.9 | 77.9 | 68.7 | 62.9 | 62.3 | 62.7 | 64.2 | 64.0 |
| 42.5° | 808.9 | 424.5 | 119.0 | 90.3 | 72.5 | 64.0 | 59.3 | 57.9 | 57.7 | 59.3 | 59.1 |
| 45° | 886.4 | 448.2 | 113.5 | 84.5 | 67.8 | 60.0 | 55.4 | 53.7 | 53.1 | 53.5 | 54.1 |
| 47.5° | 970.9 | 477.3 | 107.8 | 79.1 | 64.3 | 56.7 | 52.2 | 50.1 | 49.1 | 49.1 | 49.1 |
| 50° | 1052.8 | 510.3 | 104.0 | 73.5 | 61.9 | 53.7 | 48.7 | 46.7 | 45.1 | 44.7 | 44.6 |
| 52.5° | 1133.9 | 542.6 | 101.1 | 68.0 | 59.1 | 49.9 | 45.5 | 43.4 | 41.5 | 40.8 | 40.4 |
| 55° | 1207.8 | 573.5 | 95.8 | 62.5 | 55.6 | 45.9 | 42.3 | 40.2 | 37.9 | 36.6 | 36.0 |
| 57.5° | 1278.7 | 599.0 | 86.3 | 56.9 | 49.9 | 42.1 | 38.9 | 36.6 | 33.9 | 32.2 | 31.4 |
| 60° | 1343.3 | 612.2 | 74.3 | 50.9 | 44.4 | 38.1 | 35.2 | 33.0 | 29.5 | 26.5 | 25.7 |
| 62.5° | 1392.4 | 607.0 | 61.3 | 44.2 | 38.5 | 34.5 | 30.7 | 28.6 | 24.6 | 21.0 | 19.6 |
| 65° | 1442.7 | 578.6 | 48.9 | 36.9 | 33.7 | 29.7 | 25.7 | 23.6 | 19.0 | 15.2 | 14.1 |
| 67.5° | 1508.0 | 518.1 | 38.5 | 30.7 | 29.2 | 23.6 | 20.2 | 18.8 | 15.6 | 12.0 | 11.2 |
| 70° | 1549.9 | 402.5 | 29.9 | 25.0 | 24.0 | 17.2 | 15.6 | 15.4 | 12.4 | 9.2 | 8.2 |
| 72.5° | 1434.9 | 263.8 | 23.0 | 19.0 | 17.2 | 11.2 | 12.0 | 12.0 | 9.0 | 6.1 | 5.4 |
| 75° | 1197.8 | 154.4 | 16.6 | 13.6 | 9.7 | 7.2 | 8.2 | 8.2 | 5.6 | 3.0 | 2.4 |
| 77.5° | 855.5 | 82.3 | 11.0 | 8.4 | 5.0 | 3.2 | 4.4 | 4.2 | 1.8 | 0.2 | 0.0 |
| 80° | 327.2 | 28.4 | 5.2 | 3.4 | 1.4 | 0.6 | 0.4 | 0.2 | 0.2 | 0.0 | 0.0 |
| 82.5° | 49.9 | 7.4 | 1.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 9.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)